

What is claimed is:

- 1 1. An apparatus comprising:
2 a capacitor having a body and a pair of terminals attached to the
3 body; and
4 a conductor defined on the body and connecting the terminals, the
5 conductor having an inductance (L) defining with a capacitance (C) of the
6 capacitor a parallel LC circuit.
- 1 2. The apparatus of claim 1 wherein:
2 the conductor is plated on the body.
- 1 3. The apparatus of claim 1 wherein:
2 the conductor is printed on the body.
- 1 4. The apparatus of claim 1 wherein:
2 the conductor has a width defining the inductance such that the
3 inductance is varied by varying the width of the conductor.
- 1 5. The apparatus of claim 1 forming a notch filter.
- 1 6. The apparatus of claim 5 wherein:
2 the capacitor has a resonant frequency greater than or equal to a
3 notch center frequency of the notch filter.
- 1 7. A notch filter having a notch center frequency, comprising:
2 a capacitor having a body and a pair of terminals attached to the
3 body, the capacitor having a resonant frequency equal to or greater than
4 the notch center frequency; and
5 a conductive trace extending along the body and connecting the
6 terminals, the trace having an inductance.

1 8. The notch filter of claim 7 wherein:
2 the trace is defined on the body.

1 9. The notch filter of claim 8 wherein:
2 the trace is plated on the body.

1 10. The notch filter of claim 8 wherein:
2 the trace is printed on the body.

1 11. The notch filter of claim 7 wherein:
2 the trace has a width defining the inductance such that the
3 inductance is varied by varying the width of the trace.

1 12. The notch filter of claim 7 for connecting between two discrete
2 segments of a signal conductor defined by a printed circuit board that also
3 defines a ground plane, wherein:
4 a product of capacitance and inductance of a virtual conductive
5 loop formed by the notch filter and the ground plane equals the notch
6 center frequency.

1 13. A printed circuit board (PCB) comprising:
2 a signal conductor comprising a pair of discrete conductor
3 segments defined by the PCB;
4 a ground plane defined by the PCB;
5 a capacitor having a body and a pair of terminals on the body that
6 connect the capacitor between the segments;
7 a conductor defined on the body and connecting the pair of
8 terminals and having an inductance, the conductor forming with the
9 capacitor a notch filter for the signal conductor such that a product of
10 capacitance and inductance of a virtual conductive loop formed by the

11 notch filter and the ground plane equals a center frequency of a notch of
12 the notch filter.

1 14. The PCB of claim 13 wherein:
2 the capacitor has a resonant frequency equal to or greater than the
3 center frequency of the notch filter.

1 15. The PCB of claim 13 wherein:
2 the conductor is plated on the body.

1 16. The PCB of claim 13 wherein:
2 the conductor is printed on the body.

1 17. The PCB of claim 13 wherein:
2 the capacitor is a surface-mount capacitor.

1 18. The PCB of claim 13 wherein:
2 the conductor has a width defining the inductance of the conductor
3 such that the notch filter is tuned by varying the width of the conductor.